

The Commercial

VEGETABLE GROWER

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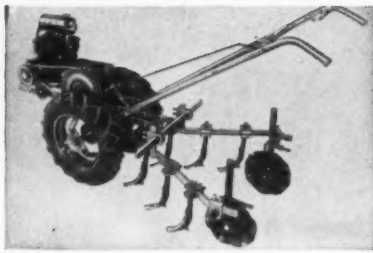
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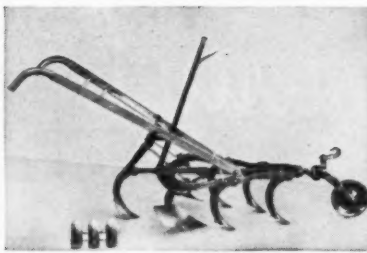
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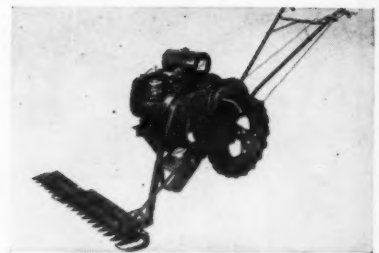
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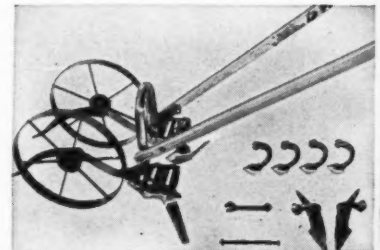
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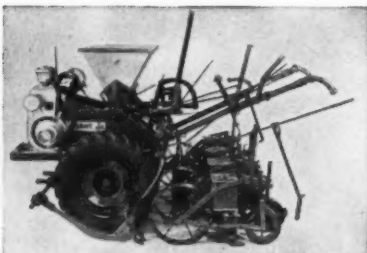
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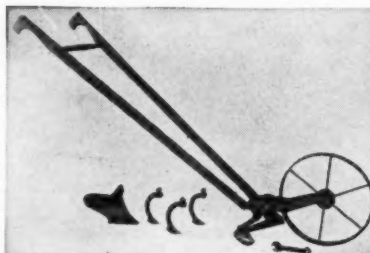
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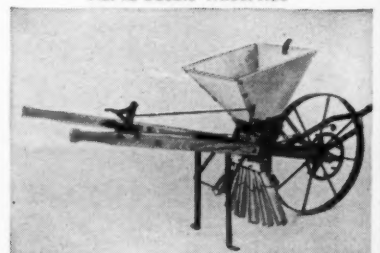
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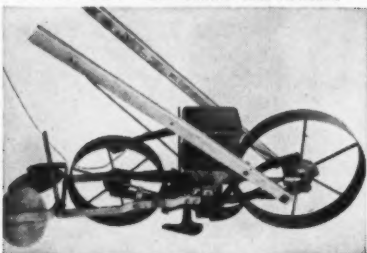
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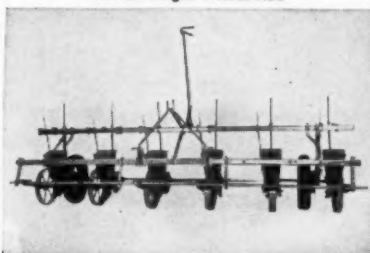
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Vol. 1 •

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JANUARY

The Commercial VEGETABLE GROWER

Vol. 1 • JANUARY, 1953 • No. 1

FEATURED IN THIS ISSUE

What Sort of A Job Is This?

Dr. Marius P. Rasmussen, reviews the many special talents needed by today's successful vegetable grower.

Talmage Farms . . .

Operating "The Friars Head Farms," a \$1,000 per acre valuation, at a profit.

Portable Sprinkler Irrigation

A manufacturer's report of how growers protected their crops and increased profits during 1952 drought.

DEPARTMENTS

The Vegetable Situation

Technical Briefs

Market Report—Potato & Onions

Equipment and Materials

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JANUARY, 1953

EDITORIAL

The Sprout Grows Green and Vigorous



THIS FIRST ISSUE of The Commercial Vegetable Grower is the promising young plant which germinated from a seed of an idea many months ago. The seed was encouraged to grow, not only by those men who are now the staff members listed in the adjoining column, but also by nearly everyone in or affiliated with the industry with whom we discussed the idea—growers, shippers, processors, agricultural specialists, suppliers and marketing men, and a host of others.

Everywhere we were told that a national service magazine which provided a competent and thorough coverage of the vegetable growing industry with authentic, accurate, informative, interesting and up-to-date articles and editorial features would be most welcome. That seemed to be the "gist" of what was needed. It made sense to us, so in our editorial policy we shall do our best to give you that kind of magazine . . . one which will be easily and quickly read, and one which will have real "meat" in it to help you in your day-to-day business.

While this first issue naturally reflects a few growing pains from those hectic first weeks of organization, we hope sincerely that it will prove both interesting and instructive. From this first issue, too, we hope you will be able to catch a glimpse of the size, scope and value of the down-to-earth service magazine we have in mind for you.

In each issue we plan to include: an on-the-spot case history of a successful grower; all new equipment developments and their practical application; new developments in chemical aids, fertilizers, seed varieties, etc.; last minute market information, price and market trends, forecasts of what to expect and prepare for in the future, etc.; plus other features of timely and profitable interest to growers.

We want this to be YOUR magazine. If it doesn't do the job you want it to do, then it isn't likely to be a very profitable or worthwhile venture for either one of us. There's one sure way of getting what you want. That's by writing us. We want and need your comments, your criticisms, your problems. Write now, and tell us the kind of articles that will be of greatest value and interest to you. Help us to help you in obtaining better growing methods and increased profits. You are the boss . . . and only with your guidance can The Commercial Vegetable Grower be the kind of publication we intend it shall be.

Cordially,

T. E. Youngblood

Publisher

See Coupon on page 5 for our Special Subscription Offer.

Page 3

THE

Vegetable

SITUATION

DECEMBER 22, 1952

CONTINUED STRONG DEMAND IN 1953. The 1953 outlook is for continued strong demand for commercial truck crops produced for fresh market shipment. Because of the relatively high prices received for most crops in the last two years, growers probably will attempt to produce at least as large a total volume as in 1952. In this event, prices received by growers and paid by consumers probably will average a little lower than in 1952, assuming a fairly normal pattern of marketings through the year.

CABBAGE: The unusual situation in cabbage last winter is not likely to be repeated this winter. Acreage of cabbage for harvest in the first quarter of 1952 was the lowest since 1941, and production was the lowest since 1943.

ONIONS: Demand for dry onions in 1953 as a whole is expected to be as strong as in 1952. Storage stocks may be somewhat larger than the much-below-average stocks of a year ago. In that event, prices for onions this winter probably will average slightly lower than the high prices received last winter, but higher than in most prior years. Next summer, farmers probably will plant a somewhat larger acreage of onions assuming the usual response to two years of relatively high onion prices. If weather is average or better, a considerably larger late onion crop would be produced under these circumstances, and considerably lower prices would result.

LETTUCE: While demand for lettuce is expected to be at least as strong in 1953 as in 1952, the prices received for lettuce next year, as in every year, depend in large part upon the quantities marketed and upon the orderliness—or steadiness—of movement to market. The latter factor is one which can not be forecast, but is one over which growers in some areas, particularly California, can exercise some control. It seems likely that lettuce production in 1953 will be near that of 1952 weather permitting. If marketings are distributed through the year in a fairly normal pattern, prices received probably will compare favorably with those received in 1952.

TOMATOES: In view of the relatively high prices received for tomatoes in 1952, it seems likely that farmers will try to expand acreage in 1953, except in the winter and late fall areas. If weather is average or better on an expanded acreage, production might be enough larger to result in appreciably lower prices for fresh tomatoes in 1953.

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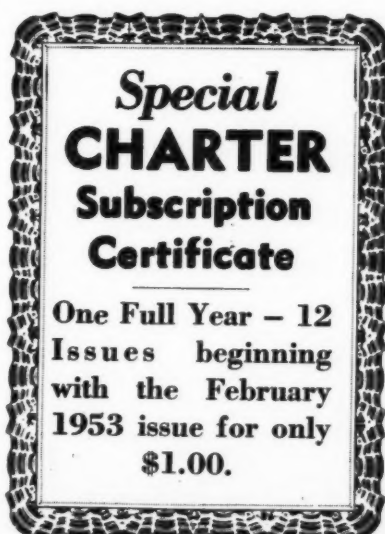
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Name

Town

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Kind of Crops Grown

Acresage Use Irrigation: Yes ☐ No ☐

Operate own packing shed: Yes ☐ No ☐

What Sort of A Job Is This?

AN AUTHORITY REVIEWS THE MANY SPECIAL TALENTS
NEEDED BY TODAY'S SUCCESSFUL VEGETABLE GROWER



By DR. MARIUS P. RASMUSSEN, Consulting Editor,
Professor of Marketing, College of Agriculture, Cornell University

MUCH midnight oil has been burned and a lot of research conducted during the past few years to learn how to increase family consumption of fresh vegetables. In practically all instances, the formula for accomplishing this objective seems to be the same — literally to see that Milady is confronted with a striking display of sparkling, crisp and colorful vegetables every time she enters the store where she usually shops for food. And, of equal importance, to be sure that deliveries are made often enough in such quantities only as can be sold daily. Only in this manner can the freshness of such produce be constantly maintained and Mrs. Consumer assured that she can always come to that store with complete confidence that a reliable supply of succulent, nutritious, health-building and flavorful vegetables will be there to fill her needs! Sounds simple, doesn't it? Yes, *too* simple! *Much* too simple!! Not because the solution is incorrect but because of the tremendous difficulties which commercial vegetable and fruit growers and all the allied trades have to overcome to meet this *SIMPLE* requirement.

A Man of Many Talents

In this year of our Lord, 1953, the production and marketing of highly perishable vegetables is decidedly a professional job. It is doubtful whether *any* profession requires a practical working knowledge of so many different sciences or fields of work as does this fresh vegetable business. A brief review of some of the fields in which the commercial vegetable grower must either have expert knowledge or

have access to expert advice will make this abundantly clear.

Soil Manager — Fertilizer Specialist

Certainly no one will deny that the commercial grower must have a thorough basic knowledge of soils and what makes them get that way. He must especially know his own soil types and how to keep them in optimum condition for maximum production. This involves, of course, a high level of information concerning the most efficient tillage implements and when to use and not to use them. Closely allied with that knowledge, he must keep abreast of the rapid strides being made in use of the appropriate kinds and quantities of fertilizers for each vegetable and especially with such little niceties as determining which of the rare "trace elements" are lacking in his soils and what it may take to maintain his soil in the proper balance. The story of boron in the cauliflower and celery industries provides an excellent example.

Bugs! Bugs! And More Bugs!

It has been estimated recently that the cost of combating destructive insect pests in these United States approximates four billion dollars annually. With such an estimate, the commercial truck crop grower will ruefully agree as he contemplates the weary and uncomfortable hours of dusting or spraying and the many dollars he has to spend annually in fighting insect pests. If he is to do his part in landing those crisp attractive vegetables on the retail counter for Mrs. Consumer's consideration, he has to be a prac-

ticing entomologist of no mean attainments. The number of insect pests is not only on the increase but with that startling adaptability which Darwin described many years ago, many of these pests have an uncanny habit of making themselves immune or less susceptible to even the newer insecticides such as DDT and the like. So, the entomologist and the grower must constantly seek out better, more lethal insecticides and he who falls behind in the procession is inevitably lost.

And Plant Diseases!

And then, of course, there is the little matter of plant diseases, which force the commercial grower to be alert to the latest developments in plant pathology to keep the ever-increasing number of blights and other types of fungi from destroying his crops entirely. True it is that penicillin, aureomycin, and most of that amazing group of new drugs we are just beginning to know, come from families of beneficial molds or fungi, and we need more of them. But if anyone knows a good use for tomato blight, or cucumber wilt, or celery spot, or bean anthracnose (just to mention a few of these plant disease "headaches"), the commercial grower has yet to hear of it. His major concern is, of course, to prevent these numerous plant diseases, many of which are airborne long distances, from either destroying his crop or seriously reducing its market value. So, he must of necessity have a practical working knowledge of the quantities and kinds of fungicides which can economically be applied.



Photo Courtesy Hahn, Inc., Evansville, Ind.

Pest Control Becomes A Must

Those Blessed (?) Weeds

The Good Book does not tell us whether or not weeds were a prominent feature in the Garden of Eden before Eve cajoled her mate into eating the forbidden fruit. But most vegetable growers will undoubtedly agree that if there were weeds in the Garden of Eden, it would have been a tremendous boon to mankind in general and to the commercial vegetable business in particular if they had just been left right there. It is questionable whether anyone could come within shooting distance of estimating how much it costs vegetable growers merely to hold down weeds enough to give their crops a reasonable chance to grow. Certainly the figure would be of astronomical proportions and would readily explain the intense interest of the entire produce business in modern power tillage implements as well as in the possibilities of controlling weeds by the use of chemical sprays, dusts, and the like. Weed control by chemical means is a field which as yet has hardly been scratched. But with its potential possibilities for reducing the use of scarce and high priced labor and of increasing yields through elimination of plant-food consuming weeds,

it most certainly is a field of knowledge in which the top-notch vegetable grower will inevitably be forced to become a practicing expert.

Mechanization Is A Must

There are few, if any, types of agriculture where so much hand labor is still required as in the production, harvesting and marketing of vegetables and where it is so important that the most efficient planting, tilling and harvesting equipment be used or that mechanization be developed to the utmost. Unlike factories, however, few growers can afford to maintain skilled mechanics to keep their large investments in equipment in working order nor can they afford to have a large field crew idle while someone runs to town to repair this and that. So, the commercial operator usually has to have something besides a green thumb; he must possess mechanical ability to a marked degree and often has to make ingenious changes in such equipment as he may be able to purchase to meet the peculiar needs of the various crops he must handle. This explains in large part the intense interest displayed by thousands of commercial growers in the machinery exhibits at the

annual field days held by horticultural and other associations in practically every state in the Union. It also explains the interest of such growers in the establishment of well staffed Agricultural Engineering Departments at agricultural colleges and experiment stations throughout the nation. No one realizes better than the commercial grower how rapidly the supply of trained and reliable labor is vanishing and how essential it is that the industry mechanize in every department possible.

And Water Is also A Must

Good soil is essential, good seed or plant stock is an absolute necessity, and all the other kinds of knowledge above enumerated must be had in the requisite proportions. But, without an adequate supply of water from the sprouting of the seed until Mrs. Consumer purchases the vegetable in the retail store, all of the rest tends to be more or less futile. Most vegetable crops have a very high content of water—finely flavored and good eating water, to be sure, but still chemically water. And only an adequate and consistent supply of water will enable the commercial grower to insure deliverance of vegetables in that succulent, crisp

Consumer Unit Packaging Of Hard Produce At Farm Level Continues



By JAMES P. DUFFY,
Director of Flexible Packaging Sales,
Union Bag and Paper Corporation

Trend toward consumer unit packaging of hard produce at the farm level continues.

DURING the past year these specially designed mesh window paper bags carried ½ billion pounds of hard produce to market. Source or farm level packaging accounted for 80% of this total.

This growing increase of source packaging speaks well for the farmer. He recognizes that today's modern supermarket has revolutionized food retailing by changing merchandising and buying habits. Now the emphasis is on selling at the point of purchase and stimulating impulse buying. This new concept of marketing places the responsibility for product turnover on the supplier. His package must sell his product, not the retailer.

Window paper bags offer both product visibility and an adequate printing surface for brand identification, the bag fits perfectly into the supermarket concept of package merchandising.

In addition to serving as a selling tool at the retail level, mesh window paper bags offer the farmer these other advantages:

1. **ECONOMY:** The bag costs substantially less than other forms of visible packaging.
2. **VERSATILITY:** Upon its introduction in 1947 the bag won immediate acceptance among potato and onion growers. Since then it's been used for packaging some of the more fancy produce items. For example the railroads recently authorized it as an acceptable container for oranges. This followed successful commercial shipments of Florida oranges to points as far as Chicago, Illinois.
3. **PRODUCT PROTECTION:** Because of its sturdy double wall construction this bag can be used at the growers level without fear of breakage in subsequent handlings by the wholesaler and retailer.
4. **EASY TO CLOSE:** The bag is easily adaptable to various methods of closure. This enables the farmer to set up a packaging operation in his own shed without too great a capital expenditure for packaging equipment. He could, for example, close the bags manually, using wire ties and a wire tying tool. This same method of closure can also be done automatically by installing a wire tying machine.

Many growers prefer a sewn closure. Edward Dilatush, a leading New Jersey potato grower, recently developed and marketed a relatively inexpensive machine for sewing bags closed automatically. Called the B & D Automatic Bag Closer, this machine closes and sews bags at speeds up to 1500 per hour. As illustrated, moving conveyors lead the filled bags in between two V belts. These belts collapse the tops of the bags and lead them through the sewing head without further handling. The speed of the conveyor is synchronized with the speed of the sewing head at 24 feet a minute. As two or more filling stations can be coupled with this conveyor, the production rate is limited only by the efficiency of the packaging operators and the bag filling speed.



The B & D Automatic Bag Closer in operation. Closes bags and sews bags up to 1500 per hour.

(Continued from Page 7)
and sparkling condition that so appeals to Mrs. Consumer. That's why so many commercial growers are keenly interested in irrigation as discussed elsewhere in this issue and why a large number of growers have become irrigation specialists as well. Only vegetables that have been grown rapidly are crisp, succulent and desirable and a steady supply of moisture is essential to rapid growth. The housewife looks with a jaundiced eye on the nubbins that might have been fine ears of sweet corn or the buttons that might have been marvelous strawberries had they not been stricken with drouth.

Distribution Has Its Headaches Too

Thus far, attention has been focused on the production side of the picture but problems of "marketing" or "distribution" are of equal or even greater difficulty for many growers. Certain it is that the successful commercial grower must qualify in many fields if he is to do a good job of marketing. Regardless of how fine a vegetable may be when harvested, it must be protected in some kind of a container so as to keep to a minimum the effect of rough handling on the way to market. There is, of course, a very sizeable industry devoted to the manufacture and sale of boxes, bags, crates, baskets, etc. for shipping produce to market. As living habits change and old materials disappear or new ones develop, there is a never ending effort to develop newer and less costly containers for transporting vegetables from farm to market. This is especially true of so called "consumer packages", although wholesale packages are also undergoing changes. So the commercial grower must add a high degree of competency in package lore to his required list of knowledge.



Photo Courtesy Union Bag Corp.

Never Ending Research Helps Growers Keep Up

RESEARCH is meaning more and more
to growers of vegetables

Growers must rely on the results of research if they are to keep up with today's fast pace. The farm has become a series of problems in management, production schedules, worker efficiency, and technical know-how. It is little wonder, then, that growers must have a steady flow of better methods and materials, developed through research, if they meet these problems successfully.

Research has given hybrid corn and improved varieties of numerous crops. It has produced herbicides or weed killers that were used on 30 million acres in the United States last year. It has formulated new and powerful insecticides to help control harmful insects. It has developed disease-resistant varieties of crops. It has brought new uses and incomes from products at one time wasted. It has produced machinery that enables one grower to produce many times the amount his predecessors produced.

All of these accomplishments, and many more, are encouraging. But they do not mean that research has completed its task. Just when plant breeders obtain crop varieties that resist one type of disease, a new and more virulent strain of disease appears, and the tedious plant breeding must begin all over again. Just when powerful insecticides seem able to kill almost any pest, the insects develop resistance to the new chemicals. Scientists say there are 30,000 plant diseases causing terrific losses each year. More than 650 major insect pests must be dealt with by American farmers.

A constantly increasing population brings a never-ending cry for more food from the farm.

Yes, agricultural research must not only hold its own, it must be speeded up. Farmers must increase production per acre and make even more efficient use than now of what they produce.

Scientists Improve Insect-Killing Lindane

A virtually invisible and longer lasting insect-killing mixture has been produced in experiments by a chemist-entomologist research team, in the U. S. Department of Agriculture. By mixing the insecticide, lindane, with a chlorinated polyphenyl, (A resin-like material), research workers of the bureau of entomology and plant quarantine have produced a substance that retains its power to kill susceptible insects at least twice as long as do normal lindane sprays. In addition the lindane mixture when applied to a surface develops none of the usual whitish powder deposits, but remains practically invisible throughout its toxic life.

The research team found that the lindane-chlorinated polyphenyl mixture (used at the rate of 50 milligrams of actual lindane per square foot) would kill 80 percent of all cockroaches exposed for 2 hours to a 60-day old treated surface. It remained lethal to 66 percent of the roaches after 90 days. Regular lindane sprays,

used at the same rate, killed only 4 percent of the roaches after 60 days.

Bureau chemists explain the properties of the new lindane blend in this way: Lindane in solutions and emulsions, when sprayed or painted on a surface, tend to crystallize out, leaving the unattractive white powder residue. Lindane also has a higher vapor pressure than other residual insecticides (such as DDT) which means that it evaporates more rapidly and thus quickly loses its killing power. Adding chlorinated polyphenyls to lindane improves the appearance of the residue by preventing crystallization.

In addition, the vapor pressure of lindane is lower in the mixture, resulting in slower evaporation and longer-lasting effectiveness against any insects coming into contact with the lindane or its fumes. As the lindane in the blend evaporates off the surface of the spray film, the body of the film, acts as a reservoir from which more lindane diffuses to the film surface. This constantly renews the insecticidal properties of the residue, and prolongs the useful life of the lindane.

A complete soil test is best for determining soil fertility but watching plants can give the tipoff on important ingredients missing. Dwarfing and uniform yellowing of the leaves means not enough nitrogen. Lack of phosphorous is shown in dwarfing with dark green foliage. Mottled foliage and marginal browning of the lower leaves indicates lack of potassium.

More Sweetpotatoes

More sweetpotatoes are needed to meet the market demand. Make plans for the 1953 crop now.



Photo shows HAHN
HI-BOY spraying lettuce with
Methoxychlor for leaf hopper control

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A field of cauliflower being irrigated on Friar's Head Farms of Nathaniel A. Talmage.

Operating The Friar's Head Farms

**SUCCESSFUL GROWING AT THE NATHANIEL A. TALMAGE FARMS,
RIVERHEAD, LONG ISLAND, N. Y.**

STORY AND PHOTOGRAPHS BY WALTER G. BEEN,
COUNTY AGRICULTURAL AGENT, SUFFOLK COUNTY, RIVERHEAD, L. I., N. Y.

THE widespread use of portable pipe irrigation has literally revolutionized farming on Long Island, one of the nation's leading potato and vegetable producing areas. It has practically eliminated the chance of crop failure on Long Island due to a lack of rainfall, declare numerous of its farmers who have installed irrigation systems. The man who played an important part in introducing and demonstrating the practicability of portable pipe irrigation on the East Coast is Nathaniel A. Talmage of Riverhead, L. I., N. Y., who with his father, the late H. R. Talmage, installed a portable pipe system on their farm in 1936. Since that time an estimated 700 farmers on Long Island have installed similar irrigation systems.

When I asked Nat. if I could write an article about his farming operations for the first issue of the *Commercial Vegetable Grower*, he gave his reluctant consent. He declared, "I have really done nothing outstanding that would warrant a story in a national magazine." I was only able to secure a "yes" answer after I had convinced him that an account of his farming methods and practices might help other vegetable growers.

Farm Consists of 240 Acres

The Talmage homestead, Friars' Head Farms, consisting of 240 acres, is situated 75 miles east of the Empire State Building and is in the heart of Suffolk County's famous potato belt. The north boundary of the farm is Long

Island Sound and on a clear day the distant shores of Connecticut can be seen across 20 miles of ocean blue.

Of the 240 acres, 198 acres are crop land. The main crops consist of potatoes, 110 acres; cauliflower, about 20 acres; King Alfred daffodils, 15 acres; Thorne wheat, 40 acres, and greenhouse tomatoes. The latter crop is planted in a 120' x 30' glass house in March after the forcing of daffodils for cut flowers is completed.

Practically all of the narcissus bulbs, grown on the 15 acres, are marketed as cut flowers during the winter and spring. This bulb raising operation was started in 1924 and for the first 10 years, it was pretty rough going; However, during recent years since the crop

has been flowers, the returned to keep last season when

Since the 1896, the potatoes. This is about 5 variety with acres about Pontiacs, latter is a yielder, but limited area only buy they find stems in

Potato Acres

The Talmage reached a World War break in the war, the sharply reduced cost accounted 1896, showing a surprise has a year out of

Potatoes late March certified seedling the seedling to 30 gallons borne organic is carefully cut pieces for a few has formed Then, the moved to potato store may be 4

Applies Per Acre

The potatoes planted with potato plant but which inches apart band of fertilizer the seed 5-10-5 mixture oxide and pounds per acre occur after sidedressed at 150 pounds

From early die in April acreage is a carbamate control but ever aphidous, par DDT in

has been marketed largely as cut flowers, the daffodils have usually returned a profit and it has helped to keep labor busy during the off season when field work is slack.

Since the farm was established in 1896, the main crop has been potatoes. This year the potato acreage is about 55 acres of the Katahdin variety with the balance of the 110 acres about evenly divided among Pontiacs, Cobblers and Essex. The latter is considerably the highest yielder, but the demand for it is limited and local buyers usually only buy it at a discount because they find it difficult to remove the stems in the grading process.

Potato Acreage Cut One-Third

The Talmage potato acreage reached a high of 150 acres during World War II, but following the break in prices at the close of the war, the acreage of spuds was sharply reduced. Complete farm cost account records, kept since 1896, show that the potato enterprise has lost money in about 1 year out of 3 on the average.

Potatoes are usually planted in late March and early April. Only certified seed is used. Before cutting the seed is dipped in a disinfecting solution of Dithane (1 pint to 30 gallons of water) to kill seed borne organisms. After cutting it is carefully cured by storing the cut pieces in a warm, moist room for a few days until a new "skin" has formed over the cut surfaces. Then, the hampers of seed are moved to a cooler part of the potato storage until planting which may be 4 to 6 weeks after cutting.

Applies 11¼ Tons Fertilizer Per Acre

The potato seed pieces are planted with a 2-row combination potato planter and fertilizer distributor which spaces the seed 12 inches apart and places a continuous band of fertilizer on each side of the seed pieces. The fertilizer is a 5-10-5 mixture 2½% of magnesium oxide and is applied at 2,500 pounds per acre. If heavy rains occur after planting, the crop is sidedressed with ammonium nitrate at 150 pounds per acre.

From early June until the vines die in August, the entire potato acreage is sprayed once a week with a carbamate fungicide plus DDT to control blight and insects. Whenever aphids start becoming numerous, parathion is substituted for DDT in the spray mixture. Potato



Nathaniel A. Talmage moving irrigation pipe in one of his potato fields.



John Talmage, son of Nathaniel A. Talmage, standing by their irrigation pump house which was constructed in 1936.



Moving and coupling irrigation pipe on Nathaniel A. Talmage's farm.



Nathaniel A. Talmage standing on the lawn in front of his house. In the background can be seen his greenhouse.

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GROWER

JANUARY, 1953

Page 11

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Start Planning 1953

COMING EVENTS

January 26-30, 1953—United Fresh Fruit & Vegetable Assn., annual conv., Hotel Statler, Los Angeles, Calif.; headquarters, 777 14th St., NW, Wash. 5, D. C.

Feb. 2-4, 1953—Ohio Vegetable & Potato Growers Assn., annual conv., Deshler Wallick Hotel, Columbus; V. E. Keirns, secy., OSU, Columbus.

Oct. 4, 1953—Third Annual Natl. Convention, Produce Prepackaging Assn., Chase Hotel, St. Louis, Mo. Week-long Conv.

Secretaries of vegetable groups — local, state, regional, etc. — are urged to send CVG dates, details, programs, etc. of meetings, conventions, field days and coming events for this column and news columns.

Bestuall Bankers Rubber Bands

"The Best Band in the Land"
Orders For A Pound or A Ton Promptly Filled

THE DYKEMA COMPANY
PITTSBURGH, PA., U.S.A.

NEW F1-HYBRID ASPARAGUS

Earlier, Produces 30% more than other varieties—giant butter tender stalks—long cutting season—F1-Hybrid roots—now available direct from

Farmer Seed & Nursery Co.,
31 N. 21st, Faribault, Minn.

SPECIALTY MACHINES

THE BRUNER VEGETABLE HARVESTER

— has no competitors. It is the only Vegetable Harvester that will harvest onions, including tender sweet Spanish and small pickling onions. It not only handles without injury, canning carrots, but also tender immature carrots for marketing in cellophane packages. It handles red beets, onions and carrots,—not one row, but generally two rows at once. Our new model has improved features that enable it to also harvest potatoes. There is no other vegetable harvester that has this amazingly wide range of successful operation on all these different crops.

THE BRUNER ONION AND RED BEET PULLER (or Windrower)

is an implement you need if you are a commercial grower of these crops. THE BRUNER ROTARY WEEDER is an implement you need, especially on onions in muck soil or any fairly loose soil. This machine has a comb attachment, a rotary wire weeder attachment and spacer (or thinner) attachment, useful on other close row crops. The Bruner Weeders are useful on tree seedlings, gladioli and asparagus seedlings and the like. We also have units of VEGETABLE TOPPERS for onions, red beets, turnips, carrots and a PICK-UP MACHINE for the small acreage growers of onions in particular.

Are you growing it to make a profit? If so, you need these specialized implements. Write for detailed information.

FARM IMPLEMENT
SPECIALTY SALES CO.

22516 Hoover Rd.
Van Dyke, Mich.

(Continued from Page 11)

harvesting starts with the early Cobbler variety, even before the vines die, in July and may continue well into October before the last of the Katahdins are stowed away in the 30,000 bushels bank type storage. During recent years, since the application of irrigation water and BDT have become a regular practice, yields have averaged around 400 bushels per acre.

Harvests Crop With Combines

The potato crop is harvested with a 2-row combination potato digger-mechanical picker which Mr. Talmage invented. In fact, he built two of these machines. One of the combines is for harvesting potatoes when the tubers are hauled directly in sacks from the field to potato grading plants for immediate shipment to market. The other combine loads the potatoes in bulk in a hopper type truck body with an unloading device which delivers the tubers automatically onto a bin loader in the potato storage. Although each combine requires a crew of 8 to 12 workers, it reduces the cost of potato harvesting by about 50 per cent.

The Friar's Head potato storage, constructed in the early 1920s, was one of the first large commercial storages on the Island. It is of the bank type and is 120 feet long by 50 feet wide. Potatoes are piled to a depth of 10 feet. A new feature of the storage, just installed this past summer, is a thermostatically controlled centrifugal fan ventilation system with proportioner dampers. Whenever the outside temperature is cooler than it is inside the storage, the ventilation system automatically goes into action and forces cold air through the pile until the inside temperature is reduced to 38° Fahrenheit.

Grows 20-25 Acres Cauliflower

Through the years, a fall harvested crop of cauliflower has been a main crop on Friar's Head Farms. Usually 20 to 25 acres of plants are set out in July and early August. Harvesting starts the latter part of September and continues late into November, usually until Thanksgiving time. Some years, cauliflower is cut almost up to Christmas. While the crop requires a great deal of hand labor, especially for tying the leaves around the heads for blanching the curds and for cutting and packing, cauliflower has almost always returned a profit in those years when potatoes sold at low prices.

All of the Talmage cauliflower crop is marketed through the Riverhead auction of the Long Island Cauliflower Association which the late H. R. Talmage helped to organize and of which he served as president and director for many years. When expanding business interests required the elder Mr. Talmage to sever his connections with the Cauliflower Association, Nat. took his place on the board of directors and served for several years until he decided it was time to step down and give other farmers a chance to serve their cooperative.

Farms \$1,000 Per Acre Land

Most Long Island potato farmers will not sell their farms for less than \$1,000 per acre unless hard times or some other unfortunate circumstance forces it. The Talmage farm is no exception. Farming \$1,000 acre land has its drawbacks. It means high assessments and high taxes. Taxes average about \$15 per acre of crop land. With such a large investment in land and the cost of government, the growing of low income crops is just out of the question. Every effort must be made to raise only cash crops which show promise of returning at least \$50 per acre profit.

Is Active Farm Leader

Nat. has not spent all of his time in running his farm. He has been active as a Farm Bureau and 4-H Club leader. He served as a member of the County 4-H Executive Committee for two terms, as a master of Sound Avenue Grange and Pomona Grange, and as a director of the Empire State Potato Club, to name a few of the farm groups with which he has been connected in an official capacity. At present, he is a director of the Long Island State Bank and Trust Company, and Vice-president of the Long Island Produce & Fertilizer Company, the largest farm supply concern on the Island.

My guess is that Nat. has obtained his greatest satisfaction from his off-the-farm activities by serving as an officer of the Baiting Hollow Congregational Church and as an official in numerous capacities in the state and national organization of the Congregations Church. He is now a member of the Executive Committee of the General Council of the Congregational-Christian Churches.

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Technical Briefs

White Grub Test-Demonstrations

Research and test-demonstrations in white grub control started in the fall of 1947 are showing progress. In these tests new organic poisons have been applied in fertilizer, as dust or sprays, and in granular form. One of the latest "wrinkles" is to apply the material in irrigation water. Test-demonstrations are now under way, in cooperation with county extension workers, in which experiment station, extension, and commercial entomologists, irrigation workers, and others have teamed up to carry out the idea which was originated by a farmer, J. K. Earle, of Edgewood farm.

Manzate Forges to The Front

Research and demonstrations tend to show that manzate looks promising, especially in control of certain vegetable diseases. Manzate is similar to ferbam and zineb in that it is one of dithiocarbamates, but, instead of containing iron as ferbam or zinc or zineb, it contains manganese. Unpublished Truck Experiment Station data suggest that it has value in cucumber anthracnose and mildew control. Demonstrations in Orangeburg County, S. C., suggest that it has value in controlling tomato bacterial spot. Trends indicate that this material controls a number of serious tomato diseases. Manzate was also used on tomatoes in Spartanburg County along with Orthocide—with both of these materials, excellent foliage was produced.

Too Much Lime May Hurt Soil

Over-liming may cause potash deficiency in soils, especially if you don't use enough potash fertilizer.

Lime lessens soil acidity by chemically replacing acid in the soil. But the calcium may replace potash, too, says Leo J. Cotnoir, of the Delaware Agricultural Experiment Station agronomy department.

"Potash can also be lost through natural drainage," explains Cotnoir. That makes it important not to add potash fertilizers too far ahead of planting. Through leaching and chemical action, the potash might not be available by the time plants need it.

Cotnoir recommends soil testing as a sure way to know the right amount of lime and potash to apply. A soil test will tell you about acidity (pH) and available potash figures. At the same time, agronomists will make recommendations for the crop you intend to grow on that soil.

Contact your county agricultural agent for instructions on taking soil samples and how much to send.

Start Planning 1953

Vegetable Seed Orders Now

IT MAY seem like a long time until the 1953 planting season rolls around but it's not too soon to begin thinking about what vegetable seeds you'll need, says Robert W. Paulson, Maine Extension Service vegetable specialist.

Paulson suggests writing now for several different seed catalogs. Then, when they arrive, commercial vegetable growers can begin planning their 1953 seed orders. By ordering early, they may be sure of obtaining the best varieties of seed adapted to local conditions.

The Extension vegetable authority says that the seed catalogs are already beginning to appear. Some companies put out special catalogs for commercial growers. These contain special prices for quantity orders.

Seed is one of the cheapest but most important items in vegetable production, so growers should order good seed from reliable seed firms, advises Paulson. The most expensive seed is not always the best, but growers should be willing to pay slightly more for good seed.

Paulson says that it usually doesn't pay commercial growers to save small quantities of vegetable seed not used in the previous year. If the seed is very expensive or is of a special strain that you can't buy readily, or if you have a large amount left over, it may pay to plant it in 1953. However, the seed should have been kept cool, dry, and away from mice, rats, and insects. It should be tested for germination by placing 100 seeds between two moist blotters and counting the percentage that sprouts.

Paulson adds the warning that hybrid varieties will not produce true strains of seed and so this seed should not be saved. A new supply must be bought each year.

Vegetable Seed Treatment

Seed treatment fungicides are not a substitute for high-quality seed. Yet, it is true, generally, that poor-quality seed shows more benefit from seed treatment than good-quality seed. Many reliable seed companies treat their vegetable seed prior to packaging. Such seed need not be treated again. The chemicals used for treating vegetable seed serve in nearly all instances to prevent seed decay and protect the young seedling from fungi in the soil or on the seed coat.

During the calendar year, 1951, according to the USDA Market News Service, there were unloaded at New York City the equivalent of approximately 200,000 carloads of fresh vegetables and fruits or about 660 carloads for every business day. No less than 70 different kinds of vegetables were included in that total. New York City is cited, not because it is unusual but because it is actually quite typical of the widespread availability of fresh vegetables throughout the United States, — indubitably the best fed nation in the world.



CONDON'S

SUPREME STRAIN RUTGERS TOMATO

(CERTIFIED SEED)

Our supreme strain of this outstanding variety has given universal satisfaction throughout the nation and we recommend it to you with confidence that you will be well pleased with it.

Our seed is all produced from pure bred planting stock, hand selected, thoroughly

re-cleaned, high germination, very resistant to Fusarium wilt. Fruit bright red, large globular shape, smooth, thick walled.

For an introductory offer to the readers of this new magazine we make the following special wholesale price for prompt order and shipment: 1/4 lb. \$1.55; 1/2 lb. \$3.00; 1 lb. \$5.75, postpaid. Cash with order or C.O.D. if you prefer.

FREE Will include Big 1953 Color Catalog

CONDON BROS. SEEDSMEN

ROCK RIVER VALLEY SEED FARM
DEPT. 231 Rockford, Illinois



Photographs from Reynolds Metals Company

Portable Sprinkler Irrigation

GROWERS REPORT HOW THEY PROTECTED CROPS AND INCREASED PROFITS WITH PORTABLE IRRIGATION DURING 1952 DROUGHT

THE 1952 drought in many parts of the country caused more and more farmers to study the possibility of using portable sprinkler irrigation.

This method of watering crops often meant the difference between burned-up crops and a tidy profit.

The performance of portable sprinkler irrigation proved so outstanding that even the major news services reported the results. For example, the Associated Press sent this item:

"Knightstown, Ind., Aug. 2 — A 16-acre field of green corn lies in the middle of thousands of acres of crops turned brown in drought-stricken east central Indiana.

"Farmer Alvin Hardin has kept the 16 acres in perfect condition by using six giant sprinklers that pour

the equivalent of 2 inches of rain in 3½ hours."

A survey by Reynolds Metals Company, a major producer of aluminum irrigation pipe, showed similar conditions all over the drought area.

Company officials were quick to point out, however, that sprinkler irrigation is not only valuable in time of drought. They stress its value as a means of insuring a regular and plentiful supply of water at all times.

Another misconception that is being broken down is the idea that irrigation is for use only in dry areas. Its use is spreading rapidly in the humid regions of the country. Farmers in the East, Midwest, and South are realizing bigger profits as a result.

Significant in this connection is a report by E. H. Davis, irrigation engineer, Georgia Agricultural Extension Service. He said:

"Supplemental moisture applied by the most up-to-date methods of irrigation is paying dividends to Georgia farmers. High-quality vegetable crops, forage crops, and specialty products are being grown during drought periods on a profitable basis.

"In addition, growers eliminate the risk of losing expensive seed, labor, time, and fertilizer when lack of moisture causes crops to fail to germinate or produce poor stands.

"Despite the fact that rainfall averages about 5,000 tons per acre annually in Georgia, lack of moisture during the growing season

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often reduces yields of high-priced crops and sometimes causes crop failures.

"Weather records show that drought periods occur one year out of three during the month of April in south Georgia. Yet, in numerous instances, truck growers could have recovered the original investment in irrigation equipment in one season's operation by supplying needed moisture during such critical periods."

Davis cited numerous instances where yield per acre was doubled by use of sprinkler irrigation. This applied to cabbage plants, snap beans, tomatoes, greens, lima beans, Irish potatoes, onion plants, and other crops.

Similar results were reported after a study by F. W. Peikert of Michigan State College. He found a 47% increase in the production of snap beans, brittle wax variety, with the application of just two inches of water at critical times when the available soil moisture

was low. The water was supplied in two one-inch applications.

With eight one-inch applications per week the increase was 55%. Water was applied in this instance whenever rainfall the previous week did not total one inch.

Production was increased 67% with the application of 15½ inches of water. This was applied at the rate of 1½ inches a week whenever the rainfall the previous week did not total 1½ inches.

In the same series of tests, the yield of tomatoes was increased from 472 bushels per acre to 771 bushels per acre by four 1-inch irrigations. Irrigation netted over \$200 per acre on these tomatoes, Peikert said.

At Riverhead, Long Island, H. R. Talmage reported that sprinkler irrigation increased his yield of potatoes and cauliflower by 50 per cent.

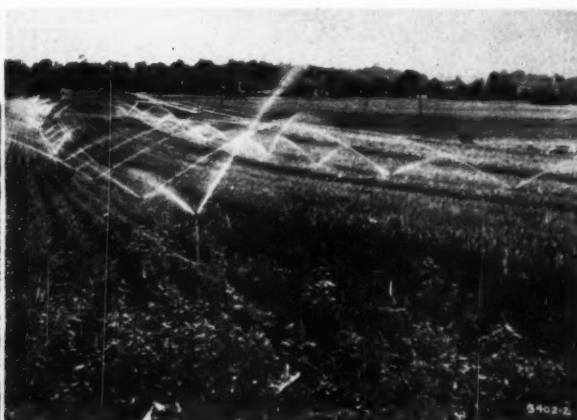
Spectacular benefits from irrigation Irish potatoes were reported in the Coastal Plains sections of

North Carolina. One farmer there had never got over 90 hundred-pound bags per acre. His average for 20 years was about 60 bags. His first irrigated crop of potatoes averaged over 200 bags.

Country agents in Arkansas found similar results. Their reports showed production of 6 tons of green beans per acre on irrigated land against 2 tons in unirrigated fields. Irrigation yielded 19 bushels of soybeans against 10 bushels per acre on unirrigated soil. The yield of tomatoes was 7.3 tons per acre against 2 tons.

A sugar beet grower in Walla Walla, Washington got a return of 39 tons per acre after installing sprinkler irrigation. Before that 25 tons was considered a whale of a good crop.

Outstanding results in the production of sugar beets were also reported by a group of farmers around Missoula, Mont. Otto Benson said: "I bought my sprinkler irrigation system as an emergency



measure, but I wouldn't part with it now. I have assured myself what can be done with it every year."

Clyde Woods, Stevensville, Mont., said he got 22 tons of beets per acre with sprinkler irrigation, whereas he obtained only 10 tons the year before.

The Mississippi Experiment Station made several tests to determine the value of irrigation on certain vegetable crops when the weather was quite dry.

A test was set up for tomatoes during a dry period in June. All plots received the same fertilizer treatment. When need for water was apparent, about 1½ inches was applied on replicated plots. Check plots were not irrigated. One irrigation gave an increase of 55 boxes per acre with a net value of \$157.50 per acre.

In the spring of 1951 a test was set up in a field of Contender bush snap beans. Replicated plots were irrigated. One application of the equivalent of 2 inches of rain was made before the first picking, and another irrigation of the same amount before the second picking.

Irrigated plots yielded 117.3 bushels per acre at the first harvest, while the unirrigated plots produced 36.8 bushels. In the second picking irrigated plots produced 121.9 bushels per acre while the unirrigated yielded 41.4 bushels.

The total of the two pickings for the irrigated plots was 239.2 bushels, which sold for \$585.77. This compared with 78.2 bushels for the unirrigated plots which sold for \$191.36. The difference in favor of irrigated plots was \$394.41 per acre.

The story is the same as regards potato production in Wisconsin. Leo Soik of Portage County said the best yield he ever got before irrigation was around 140 bushels per acre. Sometimes the yield was as low as 60 bushels per acre in bad years. In his first year of irrigating, the average was 225 bushels an acre. In the second year it ran about 300 bushels per acre.

To get that yield, Soik pumped between 3 and 4 inches of water on his crop. This cost around \$1.25 for fuel and oil per acre for each inch of water, or between \$4 and \$5 an acre for oil and fuel for the year. Soik figured he came out way ahead, even adding the cost of labor and equipment depreciation.

Many growers in Oklahoma depend almost wholly on sprinkler irrigation. "If you have the water, you can fertilize, and you must fertilize when you double and

triple yields," said Clarence Detter of near Oklahoma City.

"I get on the market early, especially with onions and radishes, and save my late vegetables from frost damage because I have the water," Detter added. "I do a lot of continuous planting of some vegetables. For example, I have a crop of radishes coming off every 18 days. It takes two waterings for each crop, and I gather eight crops a year.

"By continuous planting, I have cleared as much as \$300 from one-third of an acre of radishes. I paid for my truck with 2½ acres of cantaloupes. You've got to have water to do that."

Detter's sprinkler irrigation system consists of one main line of aluminum pipes running the full length of his 20-acre field, plus four sprinkler lines 56 feet apart. The sprinklers are placed every 48 feet. The source of water is a 40-foot gravel-packed well.

"I can uncouple sections of pipe of two sprinkler lines, move and recouple them in 40 minutes, while the other two lines are operating," Detter said.

Before beginning to use sprinkler irrigation, Detter considered his water supply, his soil, and his crops. He also studied about the equipment he would need, but ran into problems that stumped him. However, his distributor of irrigation equipment was well qualified to answer them. The distributor helped Detter build at minimum cost a complete sprinkler system that fitted his needs.

Costs always vary from farm to farm and from locality to locality for both equipment and operation. Some systems cost as little as \$50 an acre to install while others will run as much as \$100 an acre.

The design of an irrigation system depends upon many factors as they exist in the particular farm to be irrigated. These are the water

supply, distance from water source to the edge of the field; elevation of field above water source to the edge of the field; elevation of field above water source; dimensions of area to be irrigated; possible future expansion; type of soils; crops to be grown; probable markets for produce; type of power available; financial status of the grower; and labor available.

The size and type of pumping unit, length and size of main and lateral pipe lines, and number and size of revolving sprinklers are all dependent on the aforementioned local factors.

Pump characteristics, horsepower requirements, pipe size, friction losses, operating pressures on sprinklers, their size and spacing, and operating costs can be determined only after careful field data have been compiled. Distributors of aluminum pipe and fittings have engineers on their staffs to do all this for the purchaser.

Ponds, creeks, and wells are the usual sources of water supply. In the case of a farm pond, it should store at least 1½ acre feet of water for every acre to be irrigated. As a general rule, a 1½-acre pond with an average depth of 5 feet would store enough water to irrigate at least five acres. Such a pond could be built if there is none available. A properly engineered pond will usually cost from \$500 upward.

Where surface water is unavailable or poorly located, the best bet may be a well. In some areas, water is almost at post-hole depth.

Sprinkler irrigation works just as well on hilly or rolling land as a result of the use of flexible joints. There is no need for leveling the land. Even distribution of the water keeps it from eroding the soil.

Fuel and power costs for pumping the water into the lines is a factor to be considered. Some farmers are able to obtain natural gas for fuel. In this case they can operate a 1,000-gallons-per-minute pump under 20 cents an hour. A person using gasoline might have fuel costs as high as \$1 an hour.

Annual repair costs usually run less than 5 per cent of the purchase price of the system, increasing with the age of the layout. Depreciation and interest should also be included. Ten years is a commonly used depreciation figure.

Some farmers report that sprinkler irrigation paid for itself in the first dry season, where there were favorable market conditions and efficient farm management.



Photo Courtesy Reynolds Metals

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¹Basis 1947

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Mont.
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Wash.
Oregon

JANUARY,

USDA Announces 1953 White and Sweetpotato Production and Acreage Goals

THE U. S. Department of Agriculture lately announced 1953 national production goals of 359 million bushels of white potatoes and 40,670,000 bushels of sweetpotatoes. These compare with a 1952 crop of 349 million bushels of white potatoes and 29,400,000 bushels of sweetpotatoes.

The Department also announced 1953 acreage goals by States amounting to a national total of 1,443,000 acres for white potatoes and 427,700 acres of sweetpotatoes. The white potato acreage sought is greater by 5,000 acres than the total planted in 1952, while the sweetpotato acreage is about 25 percent or 84,900 acres larger than the 1952 planted acreage. With average yields the goal acreages should produce 359 million bushels of white potatoes and 40,670,000 bushels of sweetpotatoes — a supply sufficient to meet all known requirements. This would provide an increase of about 3 percent in 1953 white potato production and 39 percent in sweetpotato production as compared with the 1952 output.

The following tables show the 1953 acreage goal for each State:

SWEETPOTATOES

Acreage required, with expected yields,¹ to obtain desired production, with comparisons.

State	1946-50 Average	Planted acreage		1953 Goal
		1951	1952 Indicated	
		— Thousands —		
N. J.	16.0	14.0	14.0	16.0
Ind.	1.1	.6	.6	.8
Ill.	1.9	1.2	1.1	1.4
Iowa	1.2	1.0	1.0	1.3
Mo.	4.1	2.5	2.0	2.5
Kans.	1.7	1.5	1.5	1.9
Del.6	.7	.8	1.0
Md.	7.2	5.0	5.0	6.0
Va.	19.2	17.0	17.0	21
N. C.	54.8	40.0	42.0	53
S. C.	46.2	28.0	26.0	33
Ga.	59.6	27.0	30.0	38
Fla.	10.9	7.5	7.5	9.4
Ky.	9.8	5.5	4.8	6.0
Tenn.	22.0	11.0	13.0	16
Ala.	43.8	21.0	20.0	25
Miss.	43.0	25.0	24.0	30
Ark.	14.0	7.0	7.0	8.8
La.	103.2	66.0	82.0	103
Okla.	5.5	3.0	3.5	4.4
Texas	52.4	22.0	30.0	38
Calif.	11.2	10.0	10.0	11
U. S.	529.4	316.5	342.8	427.7

¹Basis 1947-51 average yields.

WHITE POTATOES

State	1946-50 Average	Planted Acreage		1953 Goal
		1951	1952 Indicated ¹	
		— Thousands —		
Maine	177	103	136	136
N. Y., L. I.	59	48	53	53
N. Y., Upstate ...	81	54	52	52
Penn.	102	70	66	67
Mich.	107	63	59	63
Wis.	85	55	59	59
Minn.	116	73	72	72
N. Dak.	130	84	91	91
S. Dak.	21	11	11	11
Nebr.	51	33	34	34
Mont.	14.0	10.3	11.2	11.2
Idaho	156	136	143	143
Wyo.	9.6	6.8	8.0	8.0
Colo.	69	47	48	48
Utah	15.1	11.8	13.5	13.5
Nevada	2.0	1.4	1.6	1.6
Wash.	33	29	26	27
Oregon	40	34	36	36

Calif., Late	40	32	36	36
New Hamp.	5.1	3.9	4.1	4.1
Vermont	6.8	4.1	4.1	4.1
Mass.	14.2	8.2	9.2	9.2
Rhode Island	5.9	4.0	4.6	4.6
Conn.	12.3	7.9	9.2	9.2
West Va.	22	15	15	15
Ohio	36	25	25	25
Indiana	23	14	13	13
Illinois	11.7	7.5	7.0	7.0
Iowa	15	8	10	10
N. Mexico	2.2	1.2	1.0	1.0
N. Jersey	49	28	27	28
Delaware	2.7	3.5	4.9	4.9
Maryland	12.1	8.2	7.4	7.4
Virginia	54	37	37	35
Kentucky	28	20	19	19
Missouri	20.6	15.0	13.2	13.2
Kansas	11.5	7.2	5.5	5.5
Arizona	5.3	3.8	4.2	4.2
N. Carolina	68	49	49	49
S. Carolina	18	13	14	14
Georgia	11.4	7.0	6.0	6.0
Florida	28.3	24.6	31.3	31.3
Tennessee	29	19	18	18
Alabama	35	31	29	29
Mississippi	17	10	8	8
Arkansas	26	14	12	12
Louisiana	21.0	12.3	10.5	10.5
Oklahoma	12.6	6.5	6.5	6.5
Texas	37.4	19.5	17.0	17.0
Calif., Early	73	49	60	60
United States	2,020.3	1,378.7	1,438.0	1,443.0

¹July 1.



LIGHT WEIGHT ALUMINUM OR STEEL

Quickly Coupled From Carrying Position

Push pipe ends together and they're locked—water-tight. Turn pipe slightly to left and pull and ends are uncoupled. Make connections without stooping. Two men can move and connect 1/4 mile Champion Pipe in 30 minutes. Full details gladly sent upon request.

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CHAMPION CORPORATION
4737 Sheffield Ave., Hammond, Indiana

Send Circular and Data Sheet for OK Champion Irrigation Pipe.

Name

Address

City State

MARKET REPORT— *POTATOES and ONIONS*

SOURCE OF INFORMATION—MERRILL LYNCH, PIERCE, FENNER & BEANE
—Brokers in Futures and Cash Commodities

The **POTATO MARKETS** have been dull and draggy during fall, although there was nothing wrong with movements as shipments continued heavy. The reason is that the trade filled up early in the fall and the pressure to sell kept the market under pressure right along. There was nothing wrong with consumption—it was just that markets were kept brim-full continually.

Counting rail and truck shipments, shipments were 10 million bushels more potatoes than last year from 18 late states. Which was more than one-third of the 29 million bushels increased production in the 18 late states.

Reports of heavy shrinkages in several sections due to warm weather at harvest time and even after getting into storage. Decay has shown up and shrinkages have been running much heavier than expected.

In **MAINE** the potato market has been a restless affair.

The export demand has been absolutely nil. Cuba has started harvesting its own potatoes. Holland is taking care of South America. Canada being anxious for export business has been quoting freely wherever possible. Canadians stepped up their shipments to this country all along the Eastern Seaboard. Its shipments to this country as of early December was a total of 1,007 cars, which compared with 417 cars to that period last year.

LONG ISLAND had a tough time marketing their remaining light supply. It was said that quality was questionable.

In **CHICAGO** receivers and jobbers squabbled over various small trade rules and regulations. According to reports there was no life in the market and everybody was crying.

In **WISCONSIN** interest shown in selling, even though the market was easier, hauling was increased.

In **RED RIVER VALLEY** a good portion of the shipments were seed. There was also a seed movement in California for shipments to the South. Seed movement also from Nebraska. The table stock market has been quiet.

COLORADO growers have been indifferent about selling. About one-third of shipments from San Luis Valley were shipped by trucks.

IDAHO has had a pretty fair market. Many of the Idaho potatoes were medium size. The big stuff found a ready market at a premium. The regular pack which ran small was hard to move.

Sorts in both Wisconsin and Idaho ran unexpectedly heavy. Shrinkage in Wisconsin was heavy.

The **FINAL CROP REPORT** for 1952 was released from the government December 17. The entire schedule has been rearranged. The former set-up called for 18 Late Surplus States. The new arrangement calls for 29 Late States—9 in the East, 9 in the Central part of the country, and 11 in the West.

The final report, in addition to adjusting the yields wherever necessary, also made changes in acreage.

In **FLORIDA** according to USDA the winter potato crop on some of the acreage showed spotted stands from loss of seed pieces at time of planting, other than this, conditions were favorable and crop responded nicely. Fort Myers section, a large part of the acreage showed irregular stands due to heavy rains.

POTATO PRODUCTION AS OF OCTOBER 1, 1952
263,611,000 lbs.
231,320,000 lbs. — 1 year ago.

ONION PRODUCTION AS OF OCTOBER 1, 1952
Acreage — 57,790
Production final figure — 29,665,000 50-lb. bags.
vs 31,078,000 — 1 year ago.

THE COMMERCIAL VEGETABLE GROWER

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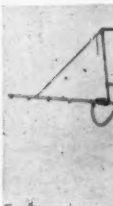
GROWER

Write for Grower's On Parathion

Book giving the use and application of parathion. Included are suggestions for the use of parathion in the control of insects by powders, liquids.

Through the use of parathion, sections of the protective equipment employed in the use of parathion. For free literature, write to Cyanamid Company, New York.

New Power



A new sprayer pump is now available from the H. D. Company. It is called the "Petey" pump.

The piston pump, company, maintains a constant output and output a minimum of 100 gallons per hour. The same type of pump is used in the company's "Peerless" pump.

Other features of the "Petey" pump are a quick changeover to an 8-gallon pump, both within 10 minutes, and a 20-gallon pump. The pump will also operate on a 10-gallon pump, which the operator can easily move to a tractor with a 10-gallon pump.

The "Petey" pump is designed for control sprayer row crops. It is suitable for tractors with 1000 r.p.m. or less. For more information write to H. D. Company, Chicago 11, Ill.

R JANUARY,

Equipment and materials

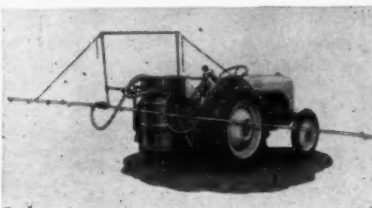
For further information and illustrated literature mention The Commercial Vegetable Grower when writing to companies below.

Write for This New Grower's Handbook On Parathion Insecticides

Book gives full information on the use and handling of parathion. Included in the book's contents are suggested safety precautions, parathion formulations, insects controlled by the material, wettable powders, dusts, and emulsifiable liquids.

Throughout the 32 page booklet are instructions for safe usage of parathion. There are well illustrated sections showing proper clothing, protective mask, and equipment employed in handling the insecticide. For free booklet write, American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N. Y.

New Power Sprayer



A new tractor power take-off sprayer featuring a positive piston pump is now being manufactured by the H. D. Hudson Manufacturing Company. It is known as the Hudson "Petey".

The piston pump, according to the company, has the advantage of maintaining efficiency in pressure and output throughout long life with a minimum of servicing. It is the same type of pump used on the company's line of self-powered "Peerless" sprayers.

Other features of the new "Petey" are a quick-set pressure regulator and an 8-way boom selector valve, both within easy reach of the tractor operator. The sprayer is equipped with a 20-foot hinged boom, with 13 10-gallon-per-acre nozzles. Users will also appreciate the "Petey's" simplified mounting arrangement, which the company says makes it easy to mount or dismount from the tractor without use of special tools.

The "Petey" PTO Sprayer is designed for general weed and insect control spraying in fields and on row crops. It fits most all U. S. tractors with PTO speeds of 600 r.p.m. or less. For further information write H. D. Hudson Manufacturing Co., 589 East Illinois St., Chicago 11, Illinois.

Ezee Flow Introduces Side-Mounted Tractor Models For Side Dressing All Row Crops



Specifically designed to meet an ever-growing demand for side dressing equipment, the Ezee Flow Corporation has added to its line of fertilizer spreaders and seeders by introducing two new side-mounted tractor models.

Models SM-22 and SM-34, for side dressing two or four rows respectively, have row spacing specifications that make them adjustable to any row width desired. Additional spouts and tubes can be added in working with narrow rows for a total of 8 for the two row model and 12 for the four row model. The picture shows tractor mounting details of model SM-34.

Exact rate of spreading of fertilizer is guaranteed and is governed by an easily seen and easy-to-set quantity dial — from 5 to 200 lbs. per tube per acre. There are no sprockets or gears to change.

Both models have the rugged, precision Ezee Flow construction, plus a number of new features. Extra large hoppers, with a capacity of 500 lbs. for the 2 row model, and 700 lbs. for the 4 row model, are pivoted so they can be emptied easily at the end of a job. Top of hopper is only 50" from the ground for easy filling, and for best full-

ahead vision. Roller chain drive is fool-proof and insures trouble-free, non-slipping operation. Friction type clutch protects operating parts against damage. Shaft extends from both ends of hopper for multiple mounting of two or more extra units.

The SM-22 and 34 will fit most John Deere and IHC tractors with standard mounting bracket. For further information on mounting particulars, and more complete data on these two new side dressing models, write to Ezee Flow Corporation, 10 S. LaSalle St., Chicago 3, Illinois.

New Willson Respirators

Willson Products, Inc., Reading, Pa., announced recently its new "Agri-Tepp" respirator for protection against low concentrations of pesticides containing TEPP (tetraethyl pyrophosphate) or HETP (hexaethyl tetraphosphate). The unit is said to furnish eight hours protection and can also be used for protection against parathion. It is recommended for field use only. Mixers, formulators and greenhouse operators using stronger concentrations or aerosols, should continue to use full face protection.



**"A TOP-QUALITY BAG
for our top-quality potatoes"**

says **FRED A. VAHLSING, JR.**
FRED H. VAHLSING



for **POTATOES, ONIONS,
ORANGES, GRAPEFRUIT,
SWEET POTATOES**



LABOR SAVINGS add up when you ship in Union Master Potato Bags. One Master holds ten 5-lb. Vent-Vu bags or five 10-lb. units. A carload in Master Bags means handling only 800 units, as against 4,000 units of 10-lb. consumer bags. Your savings on handling alone pay for the extra protection.

Can be wire-tied or sewn.

Double layer of wet strength kraft insulates potatoes against sudden temperature changes.

Made with or without Piku handles (of reinforced crepe paper).

Strong brand name promotion in up to four colors.

Wet-strength paper for safety from breakage because of moisture.

Big window for selling display.

Fills, loads, stacks faster than any other form of visible packaging.

Lacing of colorful cotton mesh for appearance, ventilation, protection.

Moisture-resistant adhesive.

Lots of room for sales-making recipes on the back.

Ties-in with United Fresh Fruit & Vegetable Assoc. "Sack-Fax" drive to increase potato use.

PREMIUM grades move faster when you pack them in Vent-Vu.

Take the case of Fred H. Vahlsing, Inc.

This experienced merchant uses Vent-Vu mesh window bags for his best potatoes. His records prove that Vent-Vu permits complete ventilation, dependably protects his merchandise, makes the greatest sales use of his potatoes' fine appearance.

Like other users, this leading packer knows you can ship Vent-Vu safely all over the country. Layers of wet-strength kraft safeguard potatoes against temperature changes, moisture, bruising and discoloration.

Vent-Vu has by far the finest record of successful potato merchandising of any mesh window bag. More growers use Vent-Vu than any other visible package for potatoes. Put this outstanding package to work for you.

VENT-VU SAMPLES

UNION VENT-VU BAGS

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WOOLWORTH BUILDING, NEW YORK 7, N. Y.

Union Bag & Paper Corporation
Woolworth Building, New York 7, N. Y.

Please send me free samples and more information about Union Vent-Vu Bags.

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